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Beyond Iron Age ‘towns’:

Examining *oppida* as examples of low-density urbanism

Summary: *The question of whether Late Iron Age oppida in Europe were truly ‘urban’ has dominated debate over these sites since the 19th century. Oppida have been surprisingly absent from comparative urban studies however, despite increasingly nuanced perspectives on the nature and diversity of the urban phenomenon. In particular, Roland Fletcher’s suggestion that oppida might represent part of a broader alternative form of low-density urbanism has been largely overlooked, by Iron Age scholars and urbanism specialists alike. With the complex nature of many oppida now becoming increasingly apparent, I suggest it is a pertinent time to assess Fletcher’s claim and examine whether oppida can be convincingly compared to low-density urbanism elsewhere in the world and if so, what implications this might have for understanding Iron Age societies. This paper argues that oppida do indeed display aspects of low-density urbanism and that this is likely to be due to the negotiated nature of power in Iron Age societies.*

INTRODUCTION

Do Late Iron Age *oppida* represent Europe’s first urbanism or should they be discussed without using terms such as ‘town’? This question has dominated debate over these sites;

their large size and impressive ramparts appearing to represent a major change in the nature of societies in the late 1st millennium BC (e.g. Collis 1984; Woolf 1993; Fichtl 2005; Sievers and Schönfelder 2012; Fernández-Götz *et al.* 2014). Surprisingly though, *oppida* have seldom figured in wider debates on the nature of early urbanism (e.g. Cowgill 2004; Marcus and Sabloff 2008; Smith 2003; Creekmore and Fisher 2014; Yoffee 2005). It seems many urbanism specialists have concurred with Greg Woolf (1993), that *oppida* diversity and their lack of many attributes commonly regarded as ‘urban’ mean they should not be discussed in the same context.

Recent perspectives on urbanism, however, emphasise its diverse nature (e.g. Fletcher 2010; Smith 2007) making it increasingly important for Iron Age studies to address more critically what we mean by ‘urbanism’, and what forms it might take. One, largely overlooked suggestion is by Roland Fletcher (2009; 2010), that *oppida* represent examples of an alternative trajectory: ‘low-density urbanism’. This observation has been largely ignored, both by those working on the European Iron Age and urbanism more generally, despite its potentially important implications for assessing whether *oppida* are distinct (Alexander 1972, 847; Woolf 1993, 231) or part of a group of alternative urban forms.

In this paper I explore the extent to which Fletcher’s concept of low-density urbanism is relevant to Iron Age *oppida* and the implications it might have for understanding the nature of these centres. In so doing, I aim to explore one avenue for moving away from discussing Iron Age monumental sites solely in a classical context and instead examine them within a framework of how pre-industrial societies manage larger social forms. Assessing *oppida* in this way may allow European Iron Age studies to contribute to wider debates on the extent

to which low-density urbanism was a common phenomenon in the ancient world (cf. Fletcher 2010).

OPPIDA AND URBANISM

The Latin term *oppidum* (plural *oppida*) derives from classical sources; most significantly Julius Caesar used it to describe several locations he encountered in Gaul in the mid-1st century BC. By the early 20th century *oppida* were argued to be a Pan-European category of monument and the term has subsequently been applied to a range of sites across Europe (Fig. 1; Salač 2012). The recurrent translation of *oppidum* as ‘town’ has since fuelled debate over whether they can be regarded as the emergence of urbanism prior to the expansion of the Roman Empire.

Before examining the relevance of concepts of low-density urbanism to *oppida* it is important to address their validity as a monument category. Definitions of *oppida* vary but many are based on a package of characteristics (e.g. Buchsenschutz and Ralston 2012; Fichtl 2005: 17-18) which include: large size (usually over 25-50ha); enclosure (usually by extensive ramparts); (3) evidence for ‘political’ activity; (4) dense occupation, with internal spatial organisation; (5) role as centre of trade and (6) function as ritual centres. Many *oppida* also appear to be *de novo* foundations, often exhibiting relatively short periods of occupation.

Sites claimed as *oppida* exist in diverse forms, including well-defined, fortified sites in central France and more polyfocal complexes in Eastern Europe (Fig. 2; Fig. 3). Meanwhile, complexes that may have shared similar social roles, such as the polyfocal *oppida* in Britain, are included or excluded, often without clear rationale (e.g. Fichtl 2005). Recent research

has only confused questions of what might be included in the phenomenon, recognising for example that large unenclosed sites (Salač 2012; Moore et al 2013) and large hillforts (Sharples 2014), usually excluded from discussion, share comparable scale and possible roles with those designated as *oppida*. The discovery that some earlier fortified sites (fürstensitze) of the 6-5th centuries BC were much larger than originally thought (Brun and Chaume 2013) also implies that *oppida* were not as distinctive as sometimes suggested. Whilst for many (e.g. Woolf 1993) such heterogeneity has led to the assertion that *oppida* as a category is obsolete, it continues to be useful in emphasising the significance of a range of monuments that were on a different scale to sites with which they were contemporary and that immediately preceded them.

Definitions of *oppida* are often guilty of emphasising a set of characteristics such as enclosure (walls), which deliberately emphasise their comparability to traditional urban forms, largely focusing their concepts of status and urbanism on classical constructs (Moore and Ponroy 2014). In focusing on aspects such as dense occupation, which (as we will see) is hardly a common characteristic, such definitions often overlook what is distinctive about *oppida*, instead focusing on what little similarity they have with ‘traditional’ urban forms (Woolf 1993). In common with debates over urbanism elsewhere (cf. Yoffee 2005) a desire to ascribe *oppida* urban status is underpinned by envisioning Late Iron Age society at a particular level of social-evolutionary complexity (the state) with concomitant requirements of urbanism and centrality. Even where alternative social forms are argued for, the frame of reference continues to be the classical world rather than urban forms beyond Europe (e.g. Sharples 2014).

Despite a desire to emphasise the characteristics *oppida* share with Mediterranean urbanism, *oppida* often lack many of the criteria traditionally required to pass the ‘urban test’ (e.g. monumental public architecture; writing, political community) set out by Childe (1950) and Weber (1921). Many also lack evidence for the dense occupation or population size thought necessary (e.g. Cowgill 2004). Woolf (1993, 231) argued that attempting to place *oppida* within the urban debate was futile, ignoring their distinctiveness. Some recent studies, however, have recognised the diversity of urbanism and attempted to re-open debate on the place of *oppida* and other large Iron Age sites (e.g. *fürstensitze*) in wider debate (Fernández-Götz *et al.* 2014). It seems a pertinent time, therefore, to reassess whether *oppida* really are distinctive or whether they share attributes with alternative solutions, in the form of low-density urbanism, to organising society.

LOW-DENSITY URBANISM: DEFINITIONS AND SIGNIFICANCE

As appreciation of *oppida* forms has become increasingly nuanced, so too urbanism studies have recognised greater diversity in what might be regarded as a ‘town’. Concepts of urbanism now avoid rigid criteria, such as population size (Smith 2003; Smith 2013), instead focusing on their relationship(s) as economic, religious or administration places, with a hinterland (Smith 2003; Smith 2007). As part of these debates, Roland Fletcher (2009; 2010) has transformed definitions of urbanism by highlighting a range of settlements which struggle to be classified in traditional terms. Such complexes are characterised by low-residential density despite the fact they are often very large in areal extent, with Fletcher (2010) describing these sites as pre-industrial, ‘low-density urbanism’.

Whilst the concept of low-density urbanism was largely borne from its recognition in the modern era (Fletcher 2009), pre-industrial low-density urbanism is now widely recognised in Southern Asia and Mesoamerica (e.g. Isendahl and Smith 2013; Fletcher 2012; Lucero *et al.* 2015). It is also now argued for in other regions and periods, including North America (e.g. Cahokia: Fletcher 2009); Eastern Europe (e.g. the Trypillia: Chapman *et al.* 2014) and Africa (e.g. Yoruba 'towns' and Great Zimbabwe: Kusimba *et al.* 2006; Fletcher 2009). As part of his discussions, Fletcher (2009; 2010) has postulated that *oppida* could be part of the phenomenon, although this suggestion has never been examined in detail. This is surprising, as Fletcher's discussion revolves around many of the core aspects which make *oppida* unusual: their large scale; their complex and (often) sprawling form, and the potential role of external (economic and political) forces in their development. If *oppida* are indeed part of the low-density urban phenomenon it may suggest that, rather than being entirely distinctive, they are part of alternative responses to social complexity. Comparison with low-density complexes might be more pertinent analogies for the economic basis and social roles of *oppida* than nucleated urbanism elsewhere.

As the examples above illustrate, low-density urbanism is highly heterogeneous. Fletcher (2012, 290) has suggested some general characteristics however: most are made up of large central clusters of activity, often with major monuments (e.g. temples), surrounded by areas of outlying settlements and sometimes large engineered landscapes. Most fundamentally, these complexes blur the distinction between the urban and the rural, integrating agriculture and open-space within their bounds (Lucero *et al.* 2015, 1140). Population densities per hectare are relatively similar between the two and clear limits to the settlement hard to define. Population size of low-density complexes varies enormously from 1000s to 100,000s, as do residential densities, which range from c. 50 people per hectare,

for some Mesoamerican cities (Isendahl and Smith 2013), to as few as four people per hectare for West African (so-called) 'giant-villages' (Kusimba 2008, 235). This compares, for example, with a likely density of c. 2-300 people per hectare for early Imperial Rome and more commonly around 100-150 per hectare for most towns in the Roman Empire (Storey 1997, 975-6; Rob Witcher pers. comm.).

This entails that centres identified as low-density urbanism vary from massive sprawling complexes, such as Angkor Wat in Cambodia (Fletcher 2012), to far smaller, technologically less-sophisticated settlements like Jenné-Jeno in West Africa (McIntosh and McIntosh 2003). Importantly, total population size is perhaps less significant in defining low-density urbanism than is the relationship between settled space and the landscape.

Fletcher (1995) regards low-density urbanism as a fundamental part of his wider consideration of how large settlements emerged. In his analysis of how settlements grew in size he established that a 100ha extent with a high residential density, was the upper limit for most pre-industrial urban centres. He argued this was based on certain constraining factors: an *Interaction limit* (the residential density at which a community could tolerably interact) and a *Communication limit* (the extent to which a communication system can operate over a settlement). These meant that a *Threshold limit* existed, below which the issues of communication would not be relevant in holding back the size of a settlement. Without a number of technological advances to overcome these constraints (such as writing and durable walls), he argued densely occupied settlements could not exceed 100ha.

As part of his analysis Fletcher recognised that certain sites were able to exceed this limit (a 'bypass trajectory') and reach huge extents despite their societies not containing the technological requirements. In order to do this, these settlements spread to low-density

residences as population grew, alleviating the problems suggested above. Within Fletcher's (1995, 200-201) discussions, he suggested that some *oppida* represented such examples: Bibracte (200ha), Kelheim (650ha) and Manching (380ha), for example, all exceed the 100ha limit. Other factors influencing why centres took low-density forms also need to be explored, however, such as integration of economic sustainability within the centre and impact of particular social forms (see Fletcher 2012; Isendahl and Smith 2013). Considering Fletcher's analysis relied on a relatively limited data-set, it seems pertinent to reassess his suggestion and examine the extent to which *oppida* can justifiably be regarded in these terms.

ASSESSING *OPPIDA* AS LOW-DENSITY URBANISM

A crucial aspect of low-density urbanism is scale, both in terms of areal extent and occupation/residential density. Fundamental to Fletcher's suggestion that *oppida* represent low-density centres is that they exceed his 100ha threshold. Depending on our definition of *oppida* (in this instance based on Fichtl 2005 with addition of some British sites), around 15% can be considered over 100ha and 5% over 300ha. The vast majority of *oppida* were not on a massive scale, however, with over 60% below 50ha, suggesting that size was not fundamental to the roles of all sites and that within current definitions of *oppida* we may be comparing sites which had quite distinct functions. It is important to point out, however, that many of those sites under 100ha, such as Titelberg (45ha), were not densely occupied and might still be described in 'low-density' terms. Meanwhile, British territorial *oppida*, most of which are not recognised in general compendia (e.g. Fichtl 2005), and are not discussed by Fletcher (1995), are regularly over the 100ha limit.

Assessing the size of *oppida* is not a simple task. For most their areal extent is based on the limits defined by the ramparts, but this presents significant problems. At some sites ramparts were constructed only after a certain phase of occupation (e.g. Manching), whilst elsewhere they do not appear to form a coherent enclosure (e.g. Camulodunum) and/or they may not define the extent of the complex (e.g. Corent-Gergovie; see below). At other sites, ramparts were never built and the sites have, therefore, never been defined as *oppida*, for example the open-agglomeration of Aulnat-Gandiallat, even though it was c. 200ha (Trément 2010). Added to this, few *oppida* are well understood in terms of spatial organisation, meaning that for many complexes (especially larger examples) our understanding of exactly where was occupied and what constituted the oppidum is limited. Defining *oppida* size solely based on the area apparently enclosed by ramparts may, therefore, be highly misleading, under-estimating the scale of some complexes whilst over-estimating that of others.

Fundamental to defining low-density urbanism is assessing residential density. This too is problematic, not least because many *oppida* have seen relatively limited investigation of their internal organisation. Whilst it is tempting to take plans of the scale of *oppida* at face-value, such plans often obscure the level of understanding of occupation areas whilst overlooking distinct spatial layouts. For this reason, it is important to examine *oppida* on a case-by-case basis and focus on those sites that are sufficiently well-understood to enable comparison with low-density urbanism elsewhere.

Bibracte (200ha) represents one of the few sites examined in any detail. A relatively detailed examination of the site's interior (with around 40% examined to some degree) allows a population estimate of c. 5 000 on Mont Beuvray (Fig. 4; Brun and Ruby 2008: 147). The

recent discovery of a contemporary satellite agglomeration at Sources de l'Yonne (c. 3km away) of c. 120ha suggests this could be extrapolated to c. 10,000 for the entire complex (Moore *et al.* 2013). This would represent perhaps c. 35 people per hectare, although it is likely to have been fewer (see below). For the relatively well-examined oppidum at Manching a population of some 5-10,000 within an enclosed area of 380ha has been proposed, suggesting a density of some 13-26 people per ha (Smith 2016).

Some other apparently nucleated sites also demonstrate relatively low-density. If the excavated area at Conde-sur-Suippe (Fig. 2; Fig. 7) is representative, the interior (total: 140ha) consisted of settlement units of c. 0.25ha. Within these we might tentatively suggest an extended household of perhaps ten people, indicating an overall population of around 5 000-6 000 people. A similar situation can be argued for Villeneuve-St-Germain (70ha) (Brun *et al.* 2000: 85). The much smaller site of Silchester (c. 30ha) appears to have a similar set up of enclosure compounds to Conde-sur-Suippe, although a smaller area has been revealed. This would suggest population densities of c.40-50 people per hectare at all three sites, although taking in to account larger open areas that existed it is likely to have been fewer.

At the more dispersed end of the spectrum, populations at polyfocal sites, such as those in Britain (Fig. 3), or continental sites such as the Heidengraben, are even harder to gauge. For the British sites the difficulties in identifying houses, partly probably due to their ephemeral nature, makes this an even greater issue. There is little to suggest that more than perhaps a few hundred people were spread over the 200ha at Bagendon, representing a population density of around two to three people per hectare, similar to that in rural areas. Similarly, at *Verlamion* (St. Albans), the population was probably in the low 1000s, perhaps fewer, over an area as great as seven square kilometres (Bryant 2007). Sometimes occupation was

clustered in higher densities within these complexes, with perhaps a few hundred within the 16ha core of the Bagendon complex (representing a density of 10-15 per ha.) although to what extent such populations were permanent is also uncertain.

There are significant difficulties in assessing *oppida* in this way. It does, however, allow us to get a comparative sense of how these sites compare with other urban forms. The occupation densities at *oppida* reflect the variety within low-density urbanism more generally (Fletcher 2012), from very low numbers in the so-called ‘giant villages’ of Africa (Kusimba *et al.* 2006, 154) and some Mayan centres (Fletcher 2012), to far higher figures comparable to those suggested for low-density Aztec cities (Isendahl and Smith 2013: 139).

One aspect of the apparent low-residential densities at *oppida* can be explained by some commonalities in their form. These may be instructive in why particular *oppida* had low-residential occupation. The spatial arrangement of a number of sites, such as Conde-sur-Suipe and Manching, consists of enclosed settlement compounds situated within the wider settlement. These included houses, storage buildings and ancillary structures as well as open areas (including yards, animal enclosures and perhaps areas for horticulture). In many instances these resemble contemporary rural enclosures aggregated within the *oppidum* (Haselgrove 1995:84; Wendling 2013: 473). This ensures significant space for each ‘household’ or family group. Whilst Conde-sur-Suipe and Manching are best known for this arrangement, the presence of what appear to be rural-like enclosures within the bounds of larger sites is also known in Britain from larger hillforts and enclosed *oppida*, such as Ham Hill and Silchester. The social implications of such arrangements are discussed below.

Large-scale, low-density mega-centres?

The problems in accurately defining the residential density and areal extent of *oppida* is further highlighted by recent research at two of the most-well examined *oppida* in Europe: Bibracte and Gergovie/Corent. Despite this, both cases may represent the most convincing examples of *oppida* as part of the low-density urban phenomenon. As is the case with research into low-density urbanism elsewhere (Fletcher 2009), shifting the focus from seemingly well-defined centres to their immediate hinterlands reveals the difficulties in defining the extent of such complexes.

Traditionally the oppidum of Bibracte has been regarded as covering some 200ha, defined by two sets of ramparts on Mont Beuvray. Recent identification of an agglomeration covering around 120ha at Sources de l'Yonne, located just 3km away and seemingly contemporary with occupation on Mont Beuvray, challenges this perspective (Moore *et al.* 2013). Its proximity, alongside evidence of similar activities and comparable occupation density, suggest it should be regarded as part of a 'Bibracte complex'. Recent field survey also indicates the presence of a range of contemporary 'rural settlements' scattered across the area around Mont Beuvray and Sources de l'Yonne (Fig. 5; Barral and Nouvel 2012). The proximity of these to the more densely settled areas begs the question to what extent these really constituted independent farmsteads as opposed to elements of a 'sprawl' between these two agglomerations. It seems more likely that all of these were effectively elements of a single centre.

A similar phenomenon appears to have existed in the Auvergne in the 1st century BC. Three *oppida* in close proximity (Corent; Gergovie; Gondole), previously believed to have been successively occupied (Collis *et al.* 2000) appear, in fact, to have been at least partly, contemporaneous (Poux 2012). Mathieu Poux (Fig. 5; 2014: 162) has suggested they

formed a coherent complex encompassing c.2500ha. The presence of additional unenclosed elements close to Corent, at Le Bay, in similar fashion to the relationship between Sources de l'Yonne and Bibracte, may imply a complex arrangement, not dissimilar to that suggested for Bibracte.

Some earlier Iron Age complexes also consisted of multiple agglomerations, both enclosed and unenclosed. At the Late Hallstatt site of Bourges (6th-5th century BC), contemporary unenclosed settlement areas existed immediately opposite the enclosed centre and a few kilometres away and seemingly part of the same settlement complex and with possibly different roles (Brun and Chaume 2013). This may imply multiple agglomerations within one 'centre' was a more widespread phenomenon than previous investigations have indicated and may have had longer antecedents. It emphasises that recognition of such multi-centred arrangements is due, in large part, to recent investigation strategies which have moved beyond the elevated, enclosed elements of these complexes.

To what extent the nucleated areas within the complexes at Bibracte and Gergovie might represent similar arrangements requires further fieldwork to better define the so-called 'rural settlements' and what existed between these foci. At Gergovie survey implies this was open space (Poux 2014), but what purpose this served (e.g. farming or space for social assembly) is unclear. It also requires a changing mind-set to accept that the limits of such complexes may not necessarily have been defined by enclosure walls.

Such complexes are very different to the low-density form seen at sites like Conde-sur-Suippe, mentioned earlier, with these examples having lower residential densities spread over far larger areas. This makes these complexes somewhat similar to the Mayan low-density centres (Fig. 6), with areas of activity, for example on Mont Beuvray and at Corent,

similarly focused around temples, representing denser occupation foci within a wider complex (cf. Isendahl and Smith 2013). The similarity of such arrangements makes these complexes some of the few *oppida* which are potentially comparable to Mesoamerican urbanism.

Low-density urbanism, open space and dispersal

Another reason that *oppida* have low-residential density, is that, like most low-density sites (cf. Isendahl and Smith 2013, 133; Fletcher 2012, 286) within most *oppida*, no matter what their overall areal extent, occupation did not cover the enclosed spaces. This varied, between the provision of large congregation spaces, as at Corent, Manching, Bibracte and Titelberg, or huge open areas with occupation scattered within the enclosure, as at the Heidengraben and British polyfocal sites. At the latter sites earthworks were clearly not designed to 'enclose' the whole settlement. This phenomenon is most obvious at the so-called 'polyfocal' *oppida*. These consist of massive earthworks often stretching for many kilometres and encompassing huge areas of landscape (Fig. 4; Moore 2012). These range from between 200-300ha, at sites like Bagendon and Stanwick, to perhaps well over 2000ha at Camulodunum. Within these complexes are often found 'elite' enclosures, sanctuary sites and areas of denser occupation alongside large open areas which make up a considerable proportion of the interior.

The arrangement of the earthworks defining the British polyfocal *oppida* suggests that their prime aim was not to define an inhabited area but was focused on creating impressive approaches to certain elements of the complex, particularly the apparently high-status or ritual enclosures (Bryant 2007; Moore 2012), whilst the level of permanent occupation at

these sites remains in question. Although contrasts are frequently drawn between such British *oppida* and European sites, a somewhat similar role can be proposed for the earthworks at continental complexes. At Kelheim, for example, the 'enclosed' nature of the complex is deceptive, with the earthworks predominantly enclosing iron-working rather than occupation areas. Elsewhere, Heidentrunk and Heidengraben also appear to use ramparts to define areas of landscape, rather than just occupation areas.

Such ambiguous definitions of the urban extent, marked by discontinuous boundary features, are a characteristic of low-density centres (Fletcher 2012, 294) and, as seen above, may not be indicative of the real limits of these centres. In using earthworks in this way, the British complexes show some similarity to the low-density urban site at Great Zimbabwe, where dispersed areas of occupation were connected by walls and routes focused on the ritual and elite centres. The far lower populations at British polyfocal *oppida* compared to Great Zimbabwe, which had perhaps 20,000 people (Pikirayi 2006), makes it hard, however, to regard these as directly comparable. More similar perhaps are what Fletcher (1991; 2010, 254) has called low-density mobile settlements, places of congregation on an urban scale. Notable comparisons are the so-called mobile capitals which administered the Ethiopian Kingdom and consisted of small permanent nuclei augmented by temporary tent dwellings at certain times of year (Fletcher 1991; 2009: 8). These locations may have housed only a few hundred people permanently, but at certain times of year they became the focus of political-military power and the population would swell (Horvarth 1969). Despite the obvious economic and environmental differences, it is not impossible to imagine that some of the polyfocal *oppida* played similar roles, with small permanent populations (probably group leaders and ritual specialists) but which at certain times of year (for tribute; ritual

rites; negotiation; war) amassed 100s, even 1000s, of people (and animals) within their bounds.

EXPLAINING LOW-DENSITY AND *OPPIDA*: ECONOMIC FACTORS

If many *oppida* fit within a broad definition of low-density urbanism, why might they have taken such forms and not developed nucleated, high density urbanism? One of the key features of low-density urbanism is the integration of agricultural production within their bounds (Kusimba *et al.* 2006: 152; Fletcher 2009: 15; Isendahl and Smith 2013; Lucero *et al.* 2015: 1140). Rather than reliance on a rural hinterland to provide food, frequently cited as a key component of traditional urbanism, most low-density urban sites appear to have been largely agriculturally self-sufficient. It is clear from discussion above that, for many of the larger *oppida* especially, the provision of open space appears to have been partly aimed at providing agricultural land. There is some evidence that *oppida* were similarly not dependent on a rural hinterland (Small 2006), although a limited understanding of the environs of many *oppida* makes such assertions difficult to confirm. For large centres, such as Bibracte, the available environmental evidence indicates that crop-production took place in the immediate environs (Jouffroy-Bapicot *et al.* 2010) and the presence of at least some farmland within the overall extent of most *oppida* is likely. For the British sites, much of the open area within their bounds seems likely to have consisted of farmland although none have seen detailed palaeo-environmental assessment to confirm this. The relatively small populations at such sites means that, at some, these areas of farmland would have been sufficient to feed the resident population. Danielisová (2014: 79) has demonstrated that many central European *oppida* reveal an absence of settlement within an area of around

5km, suggesting farming from the centre itself. This is consistent with the farming areas exploited from urban centres elsewhere (cf. Wilkinson *et al.* 2007: 57). The difference at some *oppida* appears to be in the provision of agriculture space 'within' the settlement complex, rather than solely outside it.

This relates to how agricultural production was organised; at most *oppida* it does not appear to have been centralised. At Conde-Sur-Suipe the existence of seemingly mutually exclusive enclosures implies the household still managed agricultural resources, even if it was organised into larger work-parties (cf. Danielisová 2014: 81). Even at large centres such as Bibracte, food storage and processing were not centralised (Fichtl 2005: 106). At other low-density urban centres access to fields and agricultural decision making was also retained under household and neighbourhood control (Isendahl and Smith 2013, 134), as seen at the 'large villages' of west Africa where farming was through kin groups organised at a neighbourhood level (McIntosh 1995a, 9).

Despite their potential self-sufficiency, it is clear that *oppida* were frequently not located to access prime agricultural land. Often positioned close to major routeways (in the form of major rivers) this has usually been argued as evidence of their role in controlling trade (Cunliffe 1988). Evidence from some *oppida* that they are close to sources of raw materials for metalworking and have large artisanal areas has been used to support the idea they acted as centres of production. Increasingly it appears that, although production and exchange took place at *oppida*, this was not their prime function. The nature of Roman imports (largely for the consumption of wine) and their treatment and deposition (on sanctuary sites and in rich burials) emphasises the main role of these goods was in ritual and commensality (Poux 2004). Elsewhere, these seem largely to have been diplomatic gifts,

reinforcing political networks, rather than large-scale trade (Haselgrove 2007: 512). Instead *oppida* seem focused on prominent and significant places. This may have been about accessing different agricultural environments and accessible for a wider population as well as referring to existing socially significant places. The economic roles of many *oppida* then appear to have been a by-product of their purpose as central meeting places, rather than their prime role (Fernández-Götz 2014).

EXPLAINING LOW-DENSITY *OPPIDA*: THE SOCIAL CONTEXT

As Fletcher (2010) implies in his discussion of mobile urbanism, the nature of larger agglomerations is closely linked to the social systems that created them. It is here that we may find more convincing explanations as to why *oppida* appear to have taken low-density form. This accepts that low-density urbanism is not purely a technological modification or somehow less complex than nucleated urbanism.

Many of the regions in which *oppida* emerged show little evidence for hierarchical social systems before the 1st century BC. Instead, these societies are likely to have been heterarchical with levelling mechanisms, such as forms of potlatch, ensuring no overall dominance by individuals or groups (Crumley 1995; 2003; Hill 2011). Continuity in such acephalous social forms, might explain the layout of some *oppida* where internal compounds appear to retain 'rural' settlement forms. Rather than similarities between rural farmsteads and enclosures within *oppida*, representing the transfer of rural elites into *oppida* (e.g. Wendling 2013: 473; Fernández-Götz 2014: 384), this similarity may demonstrate the opposite with the social unit it represented (the extended household) remaining the essential building block of the community, even if they were more closely aggregated. Such

layouts potentially mark the tension in transforming what were rural, heterarchical societies into more centralised forms.

This use of compounds, as at Conde-sur-Suippe, to create low-density forms share similarities with the large 'village' clusters recognised in other parts of Africa, such as the clustered agglomerations of the Igbo in Nigeria and to some extent dispersed clusters, such as Jenné-Jeno in Mali (McIntosh 1995a; McIntosh and McIntosh 2003). These too consisted of compounds of extended households, often aggregated together (Fig. 7). Each smaller area appears to have had meeting places (assembly houses) with which to organise the community (Forde 1964, 50). At Jenné-Jeno, the discreet areas show little sign of hierarchical social or spatial organisation, instead apparently organised on a heterarchical basis of smaller village groups (McIntosh 1995b, 75-76; McIntosh and McIntosh 2003).

A tendency towards low-density settlements might even be regarded as relatively characteristic of most Iron Age societies in western Europe. The recently examined 'hillfort' of Ham Hill (85ha) has a spread of rural-like enclosures across its interior (Sharples 2014, 225), not dissimilar to some enclosed *oppida*. The *oppida* of Spain, so often excluded from debate (e.g. Fichtl 2005), also sometimes have a tendency to low-density: Ulaca (70-80ha), for example, contains a widely spread scatter of c. 250 dwellings, estimated at a population of c. 1400 (Álvarez-Sanchís 2005), giving a density of c. 18 per hectare. Even at more densely occupied hillforts, the best examined, Danebury in southern England had a potential population of c. 250 at its peak (Davis 2013), indicating a density of c. 50 people per hectare. The reasons for this emphasis on low-density are likely to be diverse, but all stress that social and economic factors led to a rejection of high-density nucleation. Those that exist,

such as the small *oppida* of Southern France (e.g. Armit *et al.* 2012) or the Lake village at Biskupin, are notable for their rarity.

By the Late Iron Age, society appears to have been undergoing significant change, evidenced by increasing status differentiations, with the appearance of rich burials and named individuals on coinage. The negotiated nature of power appears to have remained significant, however, based on forms of clientage which extended over considerable areas, whilst power remained in the hands of oligarchies (Collis 2000: 232). The presence of oligarchic, rather than centralised power, might explain the multi-centric nature of the large complexes like Bibracte and Corent-Gergovie with these areas less about functional distinctions, than reflecting the dispersed nature of power within these communities.

Such societies will have required locations for the negotiation of control, over people, territories and resources, for which periodic assembly of the dispersed population was required. The provision of large open spaces at the majority of *oppida* suggests this was one of their prime roles, one supported by the limited textual sources we have for the period (Fichtl 2005: 121; Fernández-Götz 2014: 390). *Oppida* would have allowed client networks over large areas without direct control or large, permanent population centres. Even at more densely settled sites, spaces for the assembly of significant numbers of people appears to have been important. Bibracte, for example, contains substantial plazas with similar spaces at Manching. Other structures also imply a combination of gathering and ritual, for example the theatre-like structure at Corent (Poux 2012). That sanctuaries appear to have been central to many *oppida* (e.g. Corent; Bibracte; Titelberg; Manching), reinforces the impression that ritual and social authority were intimately combined in Late Iron Age

society and may have acted as one of the draws for such periodic assemblies (Fichtl 2006; Fernández-Götz 2014).

The similarity in the dispersed and low-density form of some African urban forms and similar presence of heterarchical social forms with leaders, rather than rulers, reflects a longstanding recognition that European Iron Age societies closely resemble those in parts of West Africa (e.g. Eggert 1999; Hill 2011). It also emphasises that the layout of Iron Age *oppida* might be underpinned by social organisation. A similar emphasis on the lack of a king or centralised government has been made for other low-density complexes, most notably Cahokia (Yoffee 2014, 411). In both cases there is perhaps a deliberate attempt to hold back the centralising, hierarchical tendency of state development (cf. Clastres 1977). This may also explain one of the characteristics of *oppida*: that they tend to be short-lived compared to other forms of urbanism. This has been claimed of other low-density forms (Fletcher 2012), although it appears to be far from universal (Isendahl and Smith 2013). Fletcher (1995, 201) argued *oppida's* potential reliance on economic sustenance from elsewhere (Rome) made them inherently unstable. Certainly new sources of power were likely to be a disruptive element in social networks of the Late Iron Age (Creighton 2000), but the very nature of the *oppida* phenomenon may not have been a stable one. The varied forms of the *oppida* suggest that communities were experimenting in how to articulate existing social systems in new forms of central place. In many instances the pressures of social negotiation and maintenance of power may have meant they were inherently unstable, explaining their demise as much as, if not instead of, the influence of Rome.

CONCLUSIONS

To what extent then is the term low-density urbanism valid or useful with regard to *oppida*?

The discussion above certainly supports Fletcher's (2009; 2010) assertion that they share some of the fundamental attributes ascribed to low-density urbanism. Forms of low-density urbanism are as diverse as *oppida*, however, with different types of *oppida* more similar to particular low-density urban sites, but not others. Some of the polyfocal centres share greater similarities with sites like Great Zimbabwe or the mobile capitals of Ethiopia; mega-centres, such as Bibracte, meanwhile, might be some of the few which bear comparisons to Mesoamerican urbanism. Nucleated *oppida*, such as Conde-sur-Suippe, by contrast, appear more similar to African 'giant villages'. Such variation reflects *oppida* diversity, which itself contrasts the emergence of very different social centres in other parts of Late Iron Age Europe, such as the Irish Royal sites and densely occupied '*oppida*' of southern France. In all cases, however, these agglomerations consistently fail to reflect traditional urban attributes. If they share any commonalities, it is that the social forms of the Late Iron Age required social assembly, reflecting perhaps the heterarchical social structures from which they emerged.

Direct comparison with low-density urbanism elsewhere is of course fraught with difficulties, clearly *oppida* diverge considerably from many examples of the phenomenon, whilst their economic and environmental contexts are significantly different. Despite the advances in understanding particular *oppida*, we still have insufficient detail on the internal layout of most complexes and have rarely explored these sites in ways that might detect the complexity of their form. More widespread use of geophysics, LIDAR and large-scale excavations are required, on a wider range of *oppida*, to fully understand how these spaces were used. Until this is undertaken, comparisons with other forms of low-density urbanism will remain in their infancy.

Whether or not we can define *oppida* as a form of low-density urbanism, exploring sites in this light is helpful, if nothing else, in allowing us to look beyond classical analogies. Placing *oppida* within broader discussion on the nature of centralization and urbanisation allows us to better appreciate the diversity of urban forms in the pre-colonial world. Whether we regard the term low-density urbanism as helpful or not in describing *oppida*, comparison with alternative urban forms helps to move away from the often theoretically isolated and classically driven paradigms of European Iron Age studies.

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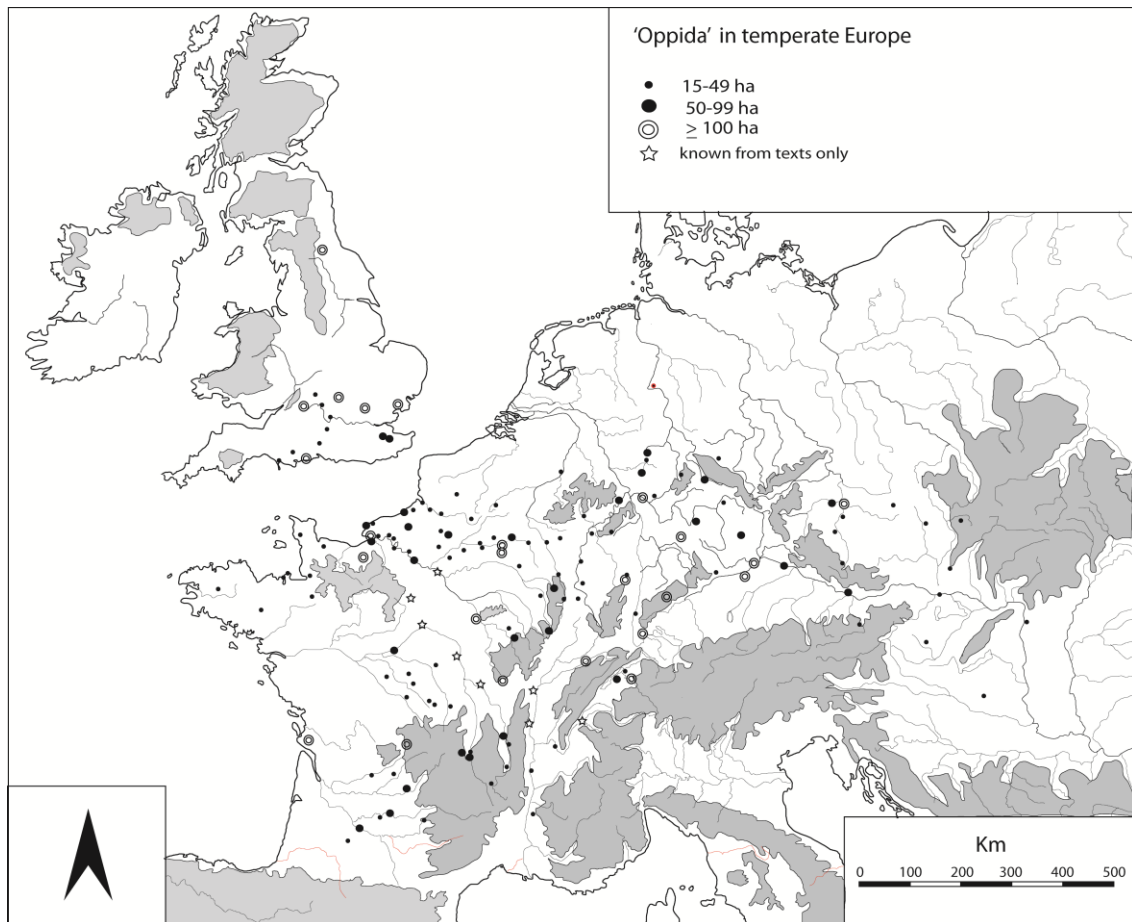


Fig. 1

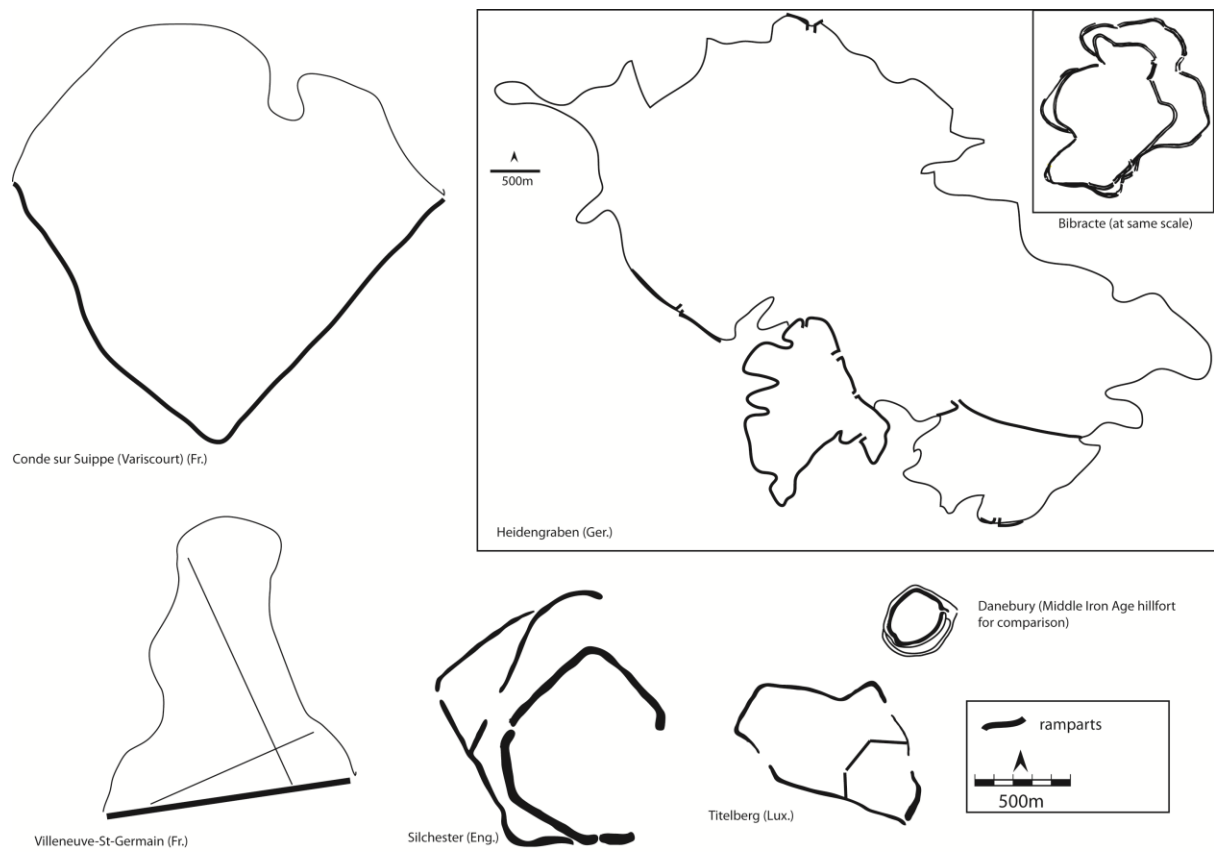


Fig. 2

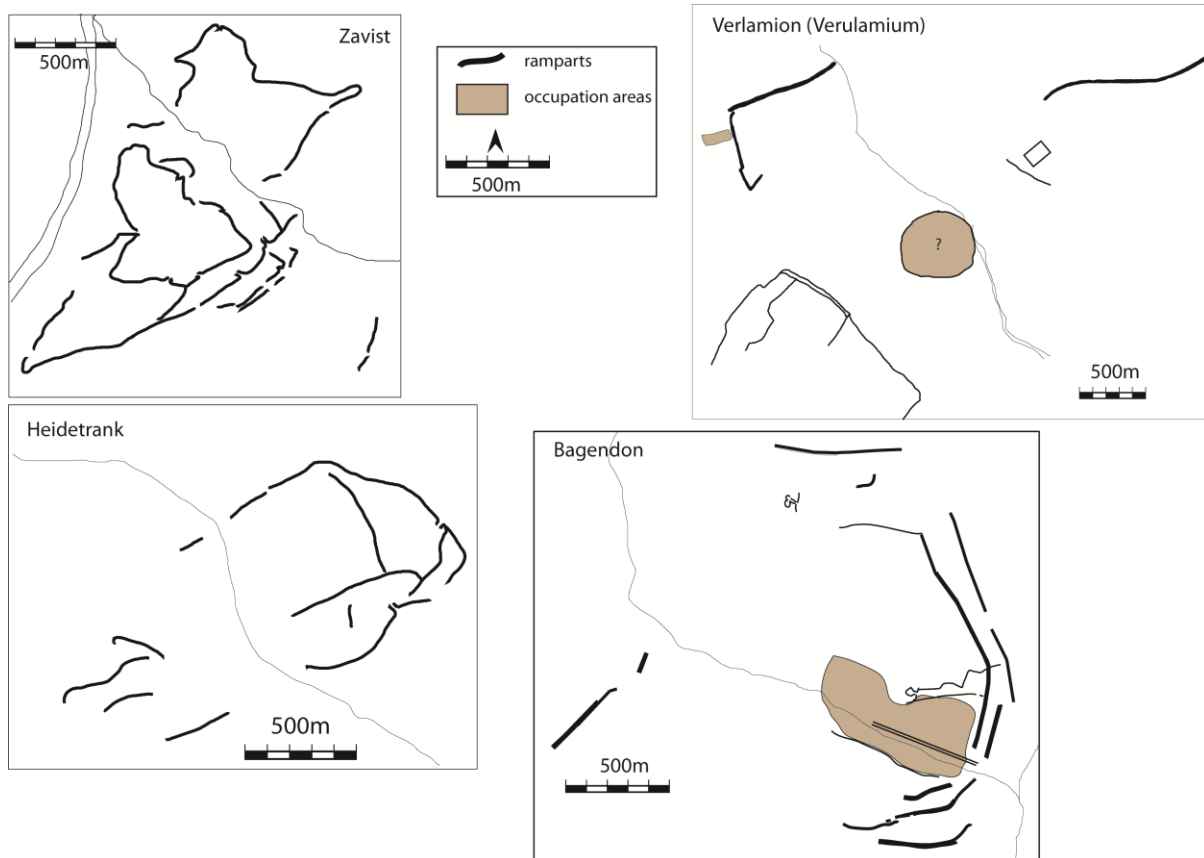


Fig. 3

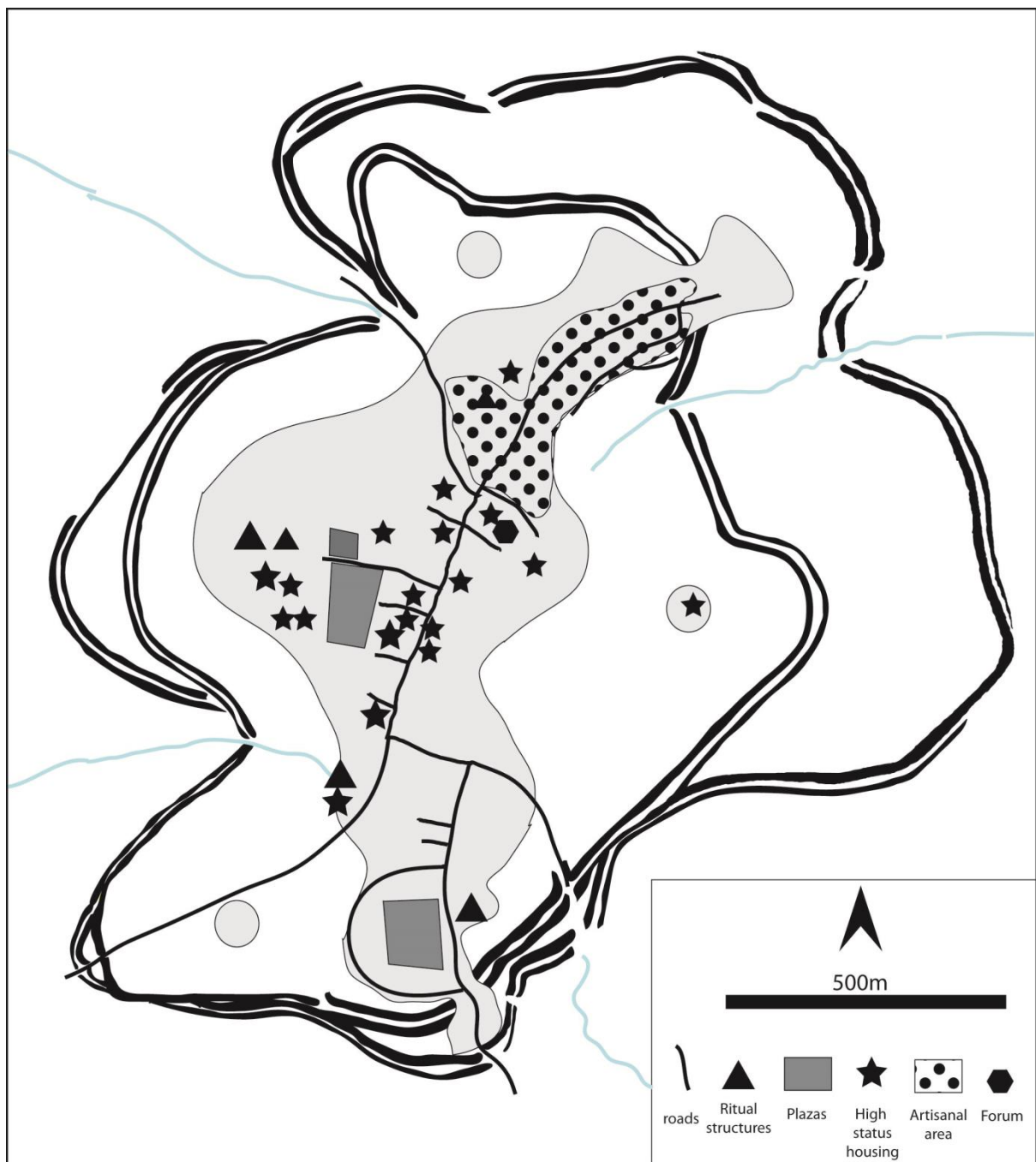


Fig. 4

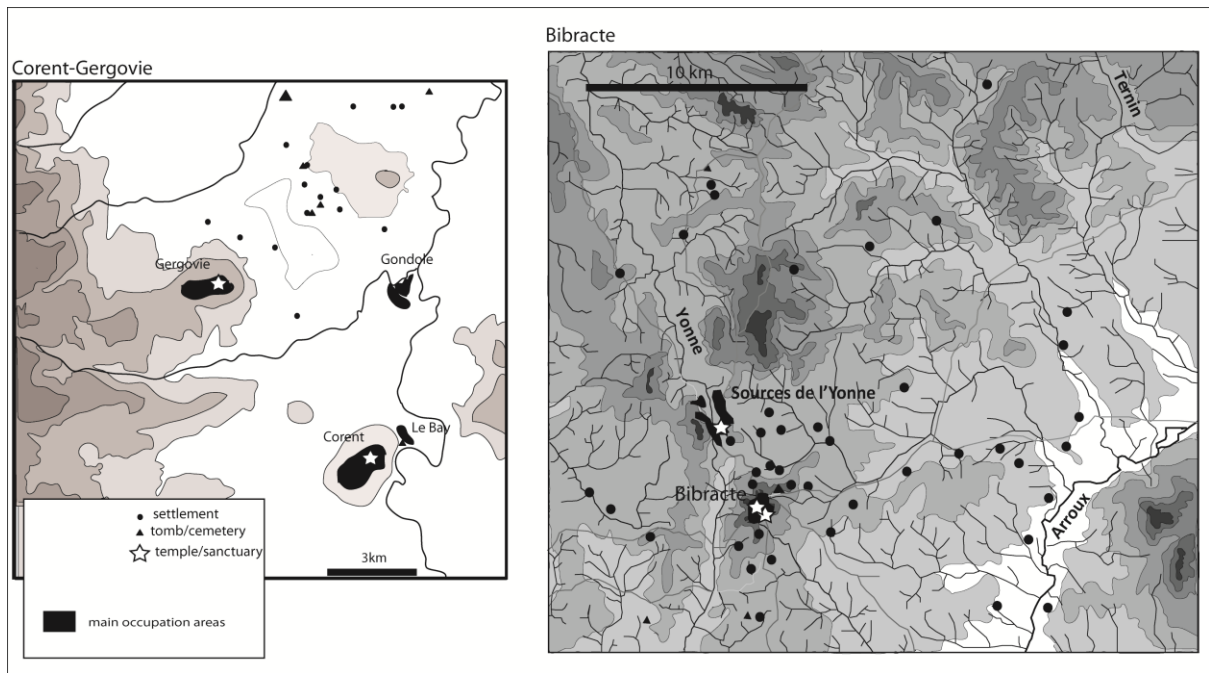


Fig. 5

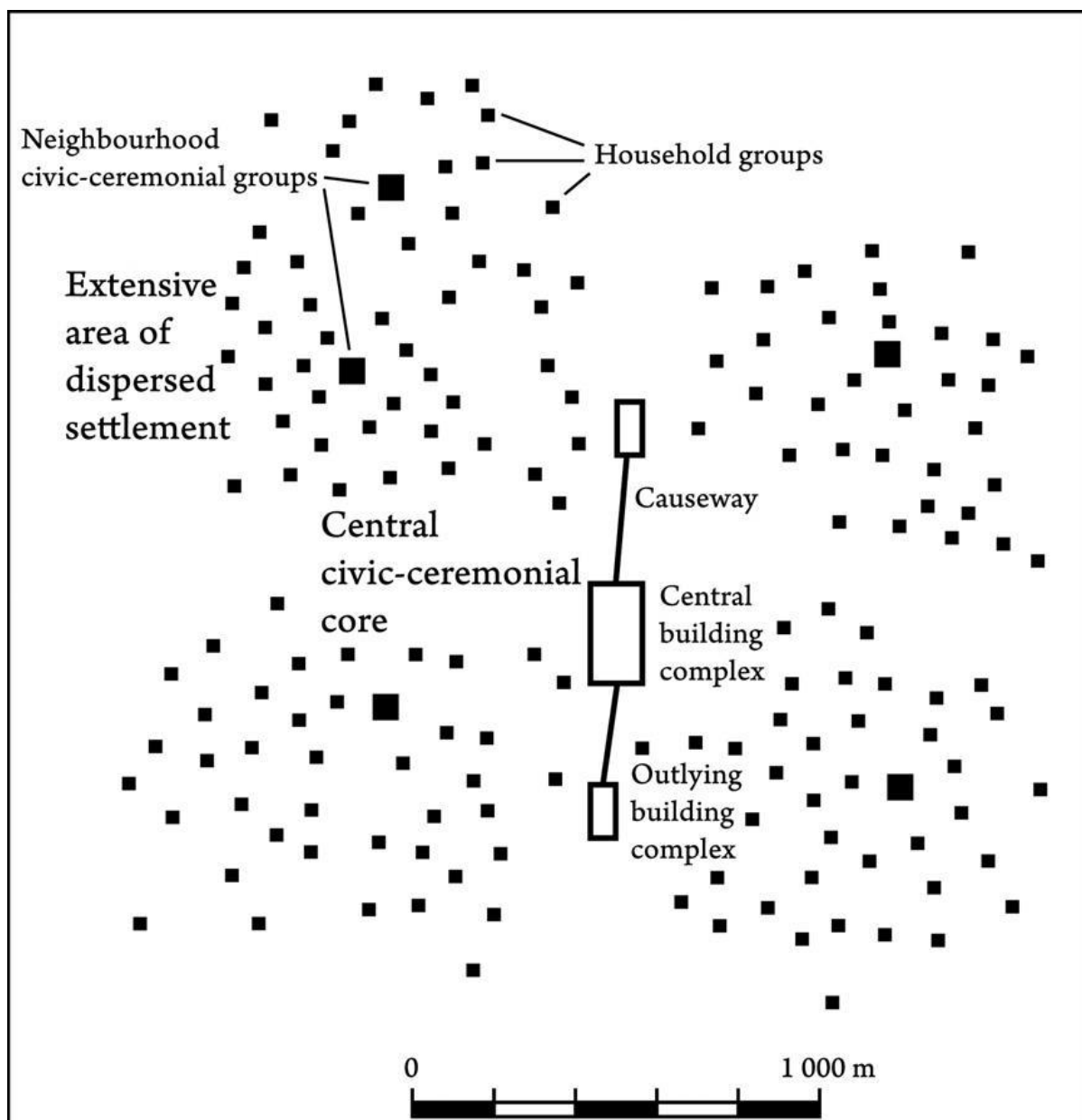


Fig. 6



Fig. 7